**Graph Analysis Free-for-All**  Name:

Rodriguez/Alg2 Date:

Time to put together everything you know about graphs of functions!

1. Here’s the graph of p(t).

i) Solve p(t) = 0.

j) Solve p(t) = 2.

k) Solve p(t) = -3.

l) State the domain and range of the function.

a) Find p(6).

b) Find p(0).

c) Find p(-7).

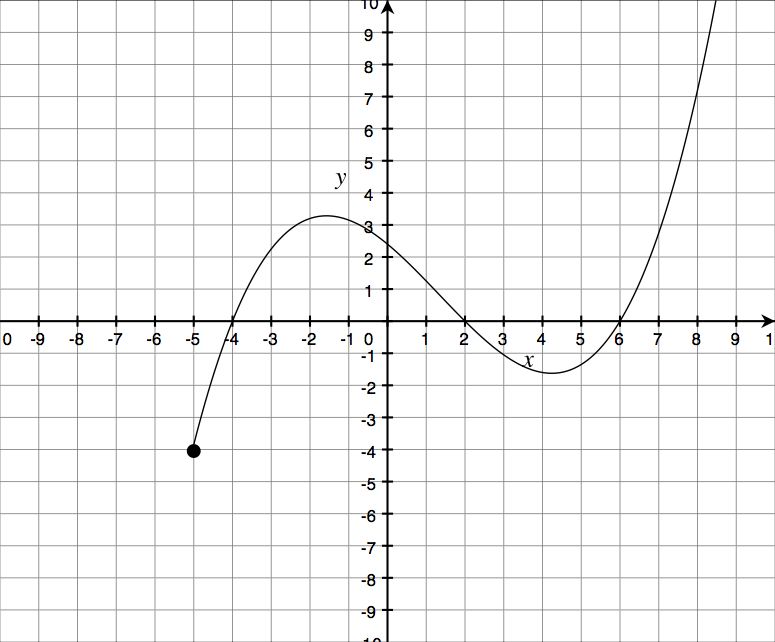
d) Find p(8).

e) Find p(3.5).

f) Find p(3) + p(2).

g) Find p(-5) + p(-1).

h) Find p(1) – p(-2).



2. Here’s the graph of f(x).

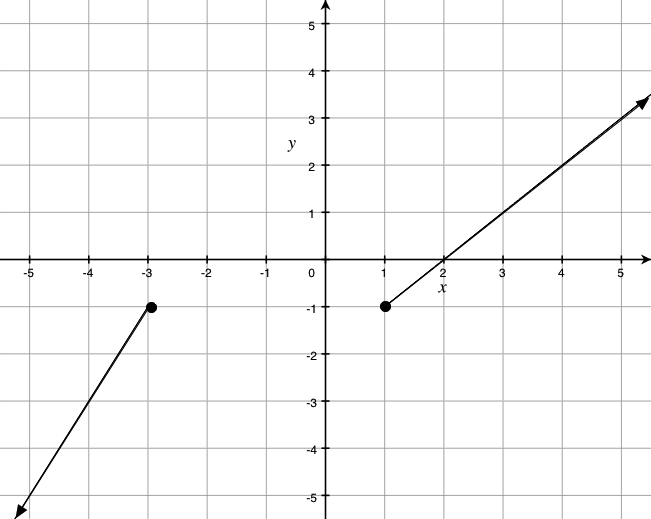
a) Why can’t we find f(0) but we ***can*** find f(2)?

b) Is f(3) > f(4)? Why?

c) Is f(-3) < 0? Why?

d) Solve f(x) = -1.

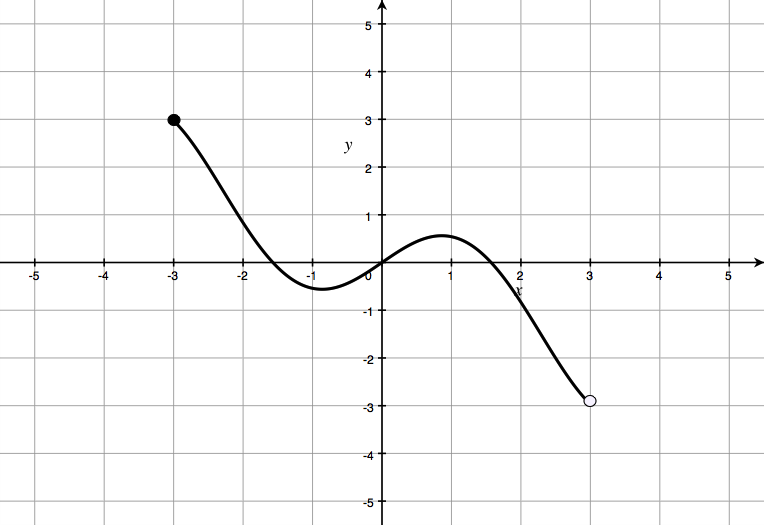
e) Find f(5) – f(-3).

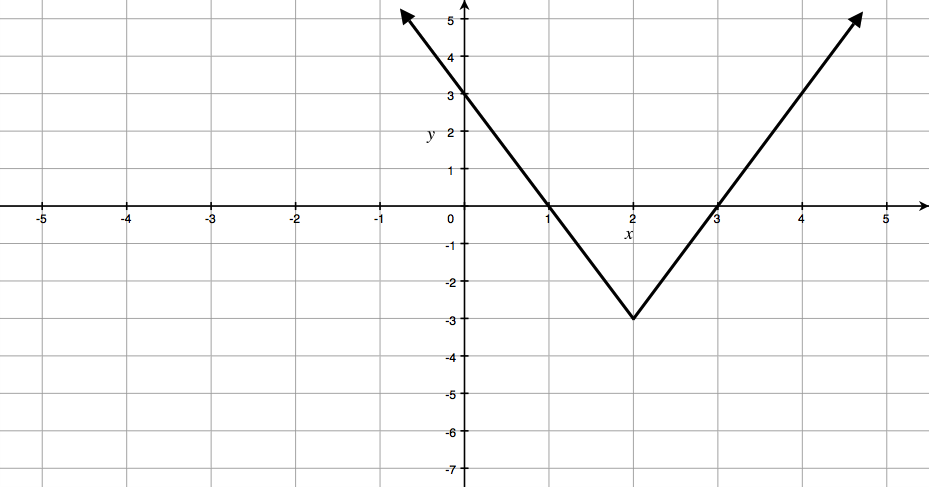


f) Why would it be incorrect to say that the domain of this function is all numbers? What ***should*** be the domain?

g) State the range of this function.

3. Explain the features of this graph and how they can be used to find its domain and range.

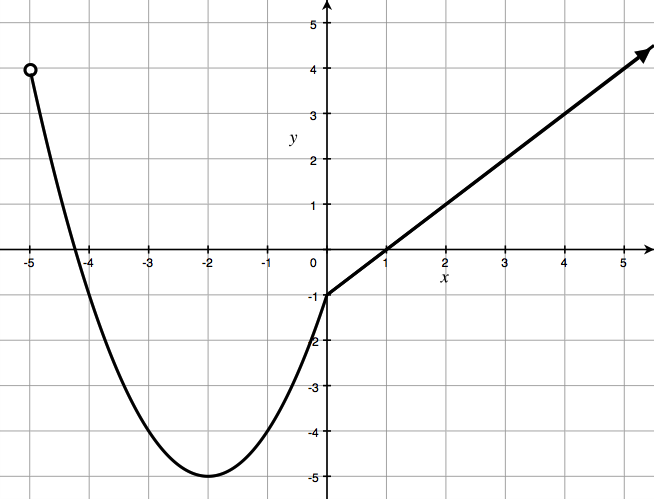


4. a) State the domain and range of this graph.

b) Find f(4) – f(2).

c) Where is f(x) < 0? (Meaning, for what x-values are the y-values less than 0?)

d) Solve f(x) = 0. e) Solve f(x) = -1.

5. a) State the domain and range of this graph.

b) Find f(1) x f(2).

c) Find f(-1) – f(1.5).

d) Solve f(x) = -2.

e) Find f(-3) + f(3).

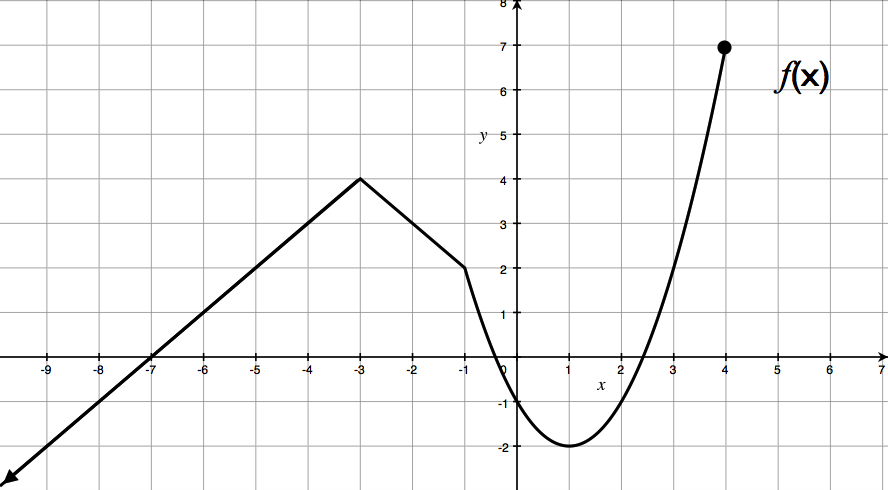
6. a) State the domain and range of this graph.

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b) Which has more solutions: f(x) = 0 or f(x) = 0.5? (State all the solutions for both, too.)

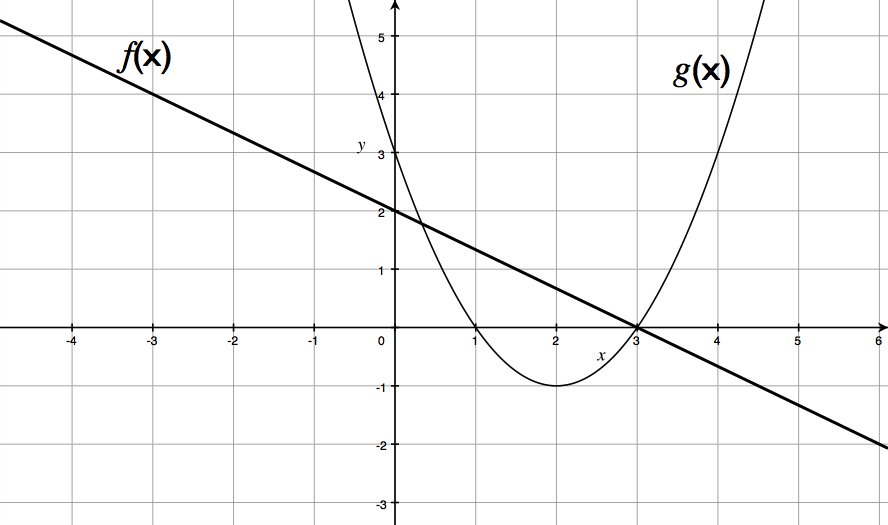
c) Why does f(x) = 1 have more solutions than f(x) = 4.5?

7. Why would it be incorrect to say that the range of this graph is all numbers between and including -2 and 7? What **should** be the range?

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b) State the domain.

8.

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a) Where does f(x) = g(x)? (Meaning, for what x-values are the y-values of f(x) and g(x) the same?)

b) State the domain and range of f(x).

c) State the domain and range of g(x).

d) Find *f*(0).

e) Find *g*(3) .

f) Find *f*(-3).

g) Find *g*(2).

h) Find *f*(6) × *g*(4).

i) Find g(4.5) + f(2.5).